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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,831	09/22/2000	Douglas W. Walker	135555-0262	2423

7590 05/16/2003
J. ANDREW LOWES
HAYNES AND BOONE
901 MAIN STREET, SUITE 3100
DALLAS, TX 75202-3789

EXAMINER

DAVIS, DANIEL J

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 05/16/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/668,831

Applicant(s)

WALKER ET AL.

Examiner

D Jacob Davis

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Req. Reconsideration 4/30/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) 13-20 and 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s) _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Bruns (US 5,368,954) in view of Alaybayoglu et al. (US 4,823,244). Bruns discloses a tool supporting end and a battery receiving end 4 (Figs. 1-2). The battery pack has an attachment end (Fig. 3-4). The Abstract describes the handpiece as a "power hand tool," which inherently has a tool supporting end. The battery pack having an alignment post 24, and a plurality of contacts 26,27 concentric to the post 24. The handpiece has a central opening (Fig. 1) with a plurality of concentric electrical contacts 8,9. In response to rotation of the battery pack relative to the handpiece, the contacts become lockingly and conductively engaged (Col. 1, lines 30-41). The battery is inherently disposable and could be used only once. In the alternative, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the battery disposable, because disposable batteries avoid charging time. Inherently, disposable batteries would be used only once.

Moreover, Alaybayoglu discloses a single use disposable battery pack to avoid further sterilization after an initial or subsequent use (Col. 1, lines 52-56 and 61-68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a single use disposable battery pack, as taught by Alaybayoglu, to avoid further sterilization after an initial or subsequent use.

Bruns does not disclose a surgical application for his generic drill and battery pack. However, the drill inherently may be used in surgery. Tools (and any battery pack associated with a tool) used in surgery without equivocation must be sterilized to prevent infection. Therefore, when used in surgery, it would have been obvious to one of ordinary skill in the art at the time the invention was made to sterilize both Bruns' drill and battery pack to prevent infection.

Bruns fails to disclose a sterile package and battery pack. However, Alaybayoglu teaches a surgical instrument having a single use disposable surgical battery pack that is provided in a sterile container to "reduce[s] the cost of sterilization" (Col. 1, lines 52-56 and 61-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to pre-sterilize the battery pack and provide it in a sterile package to "reduce the cost of sterilization."

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruns in view of Alaybayoglu and in further view of admitted prior art. The limitations of claim 3 are cited in the rejection of claim 1. The longitudinal axis runs along the center of post 24.

All of the limitations of claims 2 and 3 are unpatentable over the Bruns/Alaybayoglu device as explained, but the Bruns/Alaybayoglu device fails to

disclose that the battery pack has a chemistry based upon lithium/manganese dioxide. Nevertheless, Applicant admitted on page 10 of the specification that lithium/manganese dioxide batteries are known to have a long burn time and are standardized batteries. Therefore their use in a disposable battery pack for a surgical instrument would have been obvious to one of ordinary skill in the art at the time the invention was made because they are standardized batteries, known to have a long burn time.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruns. Bruns discloses a battery pack having means indicating by sound. The snap action elements 27,28 and 19 inherently would make a noise once locked into position. The contacts are arranged concentrically about the post and opening. Bruns fails to disclose that the post is connected to the battery receiving end and the central opening is connected to the battery pack attachment. He discloses the exact reverse. It has been held that merely reversing parts is within the level of ordinary skill in the art. (See MPEP 244.04, VI, A.) Moreover, the post 24 serves to align and secure the tool receiving end and the battery pack. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to simply *entirely* reverse the interface configurations of the battery receiving end and the battery pack. Doing so allows the post 24 to be inserted into the central opening of the battery pack, serving to align and secure the tool to the battery pack.

Claims 5, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruns in view of Alaybayoglu. The obvious limitations of the claims have heretofore been explained. In Figs. 1-4, Bruns discloses flat end surfaces.

In Col. 3, lines 46-52, Bruns discloses that in order to lock the battery pack with the tool, all that is required is to insert detents 19 axially into recesses 13. However, to release the detents, they must first be rotated before removed axially. Once rotated out of locking position, they may be rotated in the opposite direction back into the locking position. In this manner, the mating components are "lockingly and conductively interengaged in response to rotation of the battery pack relative to the handpiece". Spring supported snap action 19 becomes lockingly engaged in response to rotation.

With respect to claims 9 and 10, Bruns discloses a non-circular battery pack, but fails to disclose a similarly shaped tool supporting end. Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the supporting end tool similarly sized and shaped as the battery pack for aesthetic purposes. Moreover, doing so also allows a user to easily recognize when the tool and pack are disengaged because they would be misaligned.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruns in view of Alaybayoglu and in further view of admitted prior art. Bruns/Alaybayoglu discloses the invention of claim 5, but fails to disclose the use of lithium/manganese dioxide batteries. The reasons for using lithium/manganese dioxide batteries are given in the explanation of claim 2.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruns. The reasons for reversing the tool supporting end and battery pack interfaces are given in the explanation of claim 4. The reasons for changing tool supporting end shape have been given in the explanation of claim 9.

Referring to "establish[ing] a pre-attachment alignment", the detents 19 of the Bruns device (Figs. 1-2) are inserted through the grooves 11 before entering the recess 13. While the detents 19 are against chamfer 12, the post 24 is inside the central opening "in a partially inserted position so as to establish a pre-attachment alignment thereof." The detents may then be rotated in and out and back in recess 13 causing the contacts to "become[ing] lockingly and conductively interengaged".

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruns in view of Alaybayoglu and in further view of admitted prior art. Bruns/Alaybayoglu discloses the invention of claim 5, but fails to disclose the use of lithium/manganese dioxide batteries. The reasons for using lithium/manganese dioxide batteries are given in the explanation of claim 2. Bruns fails to disclose a sterile package. The reasons for using a sterile package are given in the explanation of claim 2.

Response to Arguments

Applicant's arguments filed April 30, 2003 have been fully considered but they are moot in view of the new grounds for rejection. Bruns discloses a generic drill and battery pack that may be used in surgery, in which case it must be sterilized.

Alaybayoglu teaches "a sterile package containing a single use, disposable battery pack." Therefore, "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." Firstly, it is commonly known that "single use, disposable" batteries include "higher energy capacity per volume," "higher energy capacity per weight," "higher reliability," and "may be entered into the normal waste stream." Moreover, Alaybayoglu teaches that in order to offer an end user a pre-sterilized battery pack, it is logical to make the battery pack disposable to allow an end user to simply discard the battery pack for a new, pre-sterile one.

Sterilizing a surgical tool and the battery pack is not novel either because any medical user would completely sterilize the entire instrument before use to prevent infection. Alaybayoglu offers an economical and time saving solution to obviate medical personnel from having to perform the sterilization of a battery pack. This economical and time saving solution may be applied effectively sterilize to the Bruns' instrument when used in surgery.

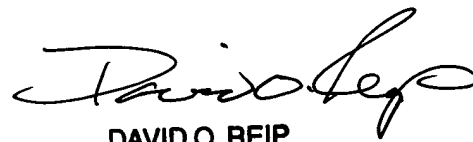
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D Jacob Davis whose telephone number is (703) 305-1232. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on (703) 308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

DJD
May 15, 2003


DAVID O. REIP
PRIMARY EXAMINER

Bruns does not disclose a surgical application for his generic drill and battery pack. However, the drill inherently may be used in surgery. Tools (and any battery pack associated with the tool) used in surgery without equivocation must be sterilized to prevent infection. Therefore, when used in surgery, it would have been obvious to one of ordinary skill in the art at the time the invention was made to sterilize both Bruns' drill and battery pack to prevent infection.

Alaybayoglu teaches a surgical instrument having a disposable surgical battery pack that is provided in a sterile container to "reduce[s] the cost of sterilization" (Col. 1, lines 52-56 and 61-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to pre-sterilize the battery pack and provide it in a sterile package to "reduce the cost of sterilization."